

SEMICONDUCTOR PRESSURE SENSOR

Abstract

A semiconductor pressure sensor comprises a non-single-crystal-silicon-based substrate, a movable insulating diaphragm, at least one piezoresistor positioned on the insulating diaphragm, an insulating supporter positioned on the non-single-crystal-silicon-based substrate for fixing two ends of the insulating diaphragm and forming a cavity between the insulating diaphragm and the non-single-crystal-silicon-based substrate, and a thin film transistor (TFT) control circuit positioned on the non-single-crystal-silicon-based substrate and electrically connected to the insulating diaphragm and the piezoresistor.